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SEQUENCE LISTING

<110> Prussak, Charles E
Kipps, Thomas J
Cantwell, Mark J

<120> Novel Chimeric TNF Ligands

<130> UCSD 263/092

<140> US 10/006,305
<141> 2001-12-06

<160> 8

<170> PatentIn version 3.1

<210> 1
<211> 771
<212> DNA
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<220>
<223> Chimeric DNA construct comprising Domain IV of hTNFa linked to Domains I, II, and III of hCD154

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ctttttgctg tgtatcttca tagaaggctg gacaagatag aagatgaaag gaatcttcat 180
gaagattttg tattcatgaa aacgatacag agatgcaaca caggagaaag atccttatcc 240
ttactgaact gtgaggagat taaaagccag tttgaaggct ttgtgaagga tataatgtta 300
aacaaagagg agacgaagaa agatgaggat cctgtagccc atgttgtagc aaaccctcaa 360
gctgaggggc agctccagtg gctgaaccgc cgggccaatg ccctcctggc caatggcgtg 420
gagctgagag ataaccagct ggtggtgcca tcagagggcc tgtacctcat ctactcccag 480
gtcctcttca agggccaagg ctgcccctcc acccatgtgc tcctcaccca caccatcagc 540
cgcatcgccg tctcctacca gaccaaggtc aacctcctct ctgccatcaa gagcccctgc 600
cagagggaga ccccagaggg ggctgaggcc aagccctggt atgagcccat ctatctggga 660
ggggtcttcc agctggagaa gggtgaccga ctcagcgctg agatcaatcg gcccgactat 720
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<210> 2
<211> 580
<212> DNA
<213> Artificial Sequence

<220>

<223> Chimeric DNA construct comprising Domain IV of hTNFa linked to Domains I, II, and III of hCD70

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ttcgcacagg ctgcggatcc tgtagcccat gttgtagcaa accctcaagc tgaggggcag 180
ctccagtggc tgaaccgccg ggccaatgcc ctcctggcca atggcgtgga gctgagagat 240
aaccagctgg tggtgccatc agagggcctg tacctcatct actcccaggt cctcttcaag 300
ggccaaggct gcccctccac ccatgtgctc ctcacccaca ccatcagccg catcgccgtc 360
tcctaccaga ccaaggtcaa cctcctctct gccatcaaga gcccctgcca gagggagacc 420
ccagaggggg ctgaggccaa gccctggtat gagcccatct atctgggagg ggtcttccag 480
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<210> 3
<211> 837
<212> DNA
<213> Artificial Sequence

<220>
<223> Chimeric DNA construct comprising Domain IV of hTNFa linked to Domains I, II, and III of hFasL

<400> 3
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ggtcaaagga ggccaccacc accaccgcca ccgccaccac taccacctcc gccgccgccg 180
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atgtttcagc tcttccacct acagaaggag ctggcagaac tccgagagtc taccagccag 360
atgcacacag catcatcttt ggagaagcaa gcggatcctg tagcccatgt tgtagcaaac 420
cctcaagctg aggggcagct ccagtggctg aaccgccggg ccaatgccct cctggccaat 480
ggcgtggagc tgagagataa ccagctggtg gtgccatcag agggcctgta cctcatctac 540
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ccctgccaga gggagacccc agaggggggct gaggccaagc cctggtatga gcccatctat 720
ctgggagggg tcttccagct ggagaagggt gaccgactca gcgctgagat caatcggccc 780
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<210> 4
<211> 813
<212> DNA
<213> Artificial Sequence

<220>
<223> Chimeric DNA construct comprising Domain IV of hTNFa linked to

Domains I, II, and III of hTRAIL

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ctggtggtgc catcagaggg cctgtacctc atctactccc aggtcctctt caagggccaa 540
ggctgccctt ccacccatgt gctcctcacc cacaccatca gccgcatcgc cgtctcctac 600
cagaccaagg tcaacctcct ctctgccatc aagagcccct gccagaggga gaccccagag 660
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aagggtgacc gactcagcgc tgagatcaat cggcccgact atctcgactt tgcggagtct 780
gggcaggtct actttggaat cattgctctg tga 813

<210> 5
<211> 256
<212> PRT
<213> Artificial Sequence

<220>
<223> Chimeric TNFa polypeptide encoded by the DNA sequence of SEQ ID NO.: 1

<400> 5
Met Ile Glu Thr Tyr Asn Gln Thr Ser Pro Arg Ser Ala Ala Thr Gly
1 5 10 15

Leu Pro Ile Ser Met Lys Ile Phe Met Tyr Leu Leu Thr Val Phe Leu
20 25 30

Ile Thr Gln Met Ile Gly Ser Ala Leu Phe Ala Val Tyr Leu His Arg
35 40 45

Arg Leu Asp Lys Ile Glu Asp Glu Arg Asn Leu His Glu Asp Phe Val
50 55 60

Phe Met Lys Thr Ile Gln Arg Cys Asn Thr Gly Glu Arg Ser Leu Ser
65 70 75 80

Leu Leu Asn Cys Glu Glu Ile Lys Ser Gln Phe Glu Gly Phe Val Lys
85 90 95

Asp Ile Met Leu Asn Lys Glu Glu Thr Lys Lys Asp Glu Asp Pro Val

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            100                 105                 110

Ala His Val Val Ala Asn Pro Gln Ala Glu Gly Gln Leu Gln Trp Leu
        115                 120                 125

Asn Arg Arg Ala Asn Ala Leu Leu Ala Asn Gly Val Glu Leu Arg Asp
    130                 135                 140

Asn Gln Leu Val Val Pro Ser Glu Gly Leu Tyr Leu Ile Tyr Ser Gln
145                 150                 155                 160

Val Leu Phe Lys Gly Gln Gly Cys Pro Ser Thr His Val Leu Leu Thr
                165                 170                 175

His Thr Ile Ser Arg Ile Ala Val Ser Tyr Gln Thr Lys Val Asn Leu
            180                 185                 190

Leu Ser Ala Ile Lys Ser Pro Cys Gln Arg Glu Thr Pro Glu Gly Ala
        195                 200                 205

Glu Ala Lys Pro Trp Tyr Glu Pro Ile Tyr Leu Gly Gly Val Phe Gln
    210                 215                 220

Leu Glu Lys Gly Asp Arg Leu Ser Ala Glu Ile Asn Arg Pro Asp Tyr
225                 230                 235                 240

Leu Asp Phe Ala Glu Ser Gly Gln Val Tyr Phe Gly Ile Ile Ala Leu
                245                 250                 255
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<210> 6
<211> 192
<212> PRT
<213> Artificial Sequence

<220>
<223> Chimeric TNFa polypeptide encoded by the DNA sequence of SEQ ID NO.: 2

<400> 6

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Met Pro Glu Glu Gly Ser Gly Cys Ser Val Arg Arg Arg Pro Tyr Gly
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Cys Val Leu Arg Ala Ala Leu Val Pro Leu Val Ala Gly Leu Val Ile
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Cys Leu Val Val Cys Ile Gln Arg Phe Ala Gln Ala Ala Asp Pro Val
        35                  40                  45
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Ala His Val Val Ala Asn Pro Gln Ala Glu Gly Gln Leu Gln Trp Leu
    50                  55                  60

Asn Arg Arg Ala Asn Ala Leu Leu Ala Asn Gly Val Glu Leu Arg Asp
65                  70                  75                  80

Asn Gln Leu Val Val Pro Ser Glu Gly Leu Tyr Leu Ile Tyr Ser Gln
                85                  90                  95

Val Leu Phe Lys Gly Gln Gly Cys Pro Ser Thr His Val Leu Leu Thr
            100                 105                 110

His Thr Ile Ser Arg Ile Ala Val Ser Tyr Gln Thr Lys Val Asn Leu
        115                 120                 125

Leu Ser Ala Ile Lys Ser Pro Cys Gln Arg Glu Thr Pro Glu Gly Ala
    130                 135                 140

Glu Ala Lys Pro Trp Tyr Glu Pro Ile Tyr Leu Gly Gly Val Phe Gln
145                 150                 155                 160

Leu Glu Lys Gly Asp Arg Leu Ser Ala Glu Ile Asn Arg Pro Asp Tyr
                165                 170                 175

Leu Asp Phe Ala Glu Ser Gly Gln Val Tyr Phe Gly Ile Ile Ala Leu
            180                 185                 190
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<210> 7
<211> 278
<212> PRT
<213> Artificial Sequence

<220>
<223> Chimeric TNFa polypeptide encoded by the DNA sequence of SEQ ID NO.: 3

<400> 7

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Met Gln Gln Pro Phe Asn Tyr Pro Tyr Pro Gln Ile Tyr Trp Val Asp
1               5                   10                  15

Ser Ser Ala Ser Ser Pro Trp Ala Pro Pro Gly Thr Val Leu Pro Cys
            20                  25                  30

Pro Thr Ser Val Pro Arg Arg Pro Gly Gln Arg Arg Pro Pro Pro Pro
        35                  40                  45
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Pro Pro Pro Pro Pro Leu Pro Pro Pro Pro Pro Pro Pro Leu Pro
    50                  55                  60

Pro Leu Pro Leu Pro Pro Leu Lys Lys Arg Gly Asn His Ser Thr Gly
65                  70                  75                  80

Leu Cys Leu Leu Val Met Phe Phe Met Val Leu Val Ala Leu Val Gly
                85                  90                  95

Leu Gly Leu Gly Met Phe Gln Leu Phe His Leu Gln Lys Glu Leu Ala
            100                 105                 110

Glu Leu Arg Glu Ser Thr Ser Gln Met His Thr Ala Ser Ser Leu Glu
        115                 120                 125

Lys Gln Ala Asp Pro Val Ala His Val Val Ala Asn Pro Gln Ala Glu
    130                 135                 140

Gly Gln Leu Gln Trp Leu Asn Arg Arg Ala Asn Ala Leu Leu Ala Asn
145                 150                 155                 160

Gly Val Glu Leu Arg Asp Asn Gln Leu Val Val Pro Ser Glu Gly Leu
                165                 170                 175

Tyr Leu Ile Tyr Ser Gln Val Leu Phe Lys Gly Gln Gly Cys Pro Ser
            180                 185                 190

Thr His Val Leu Leu Thr His Thr Ile Ser Arg Ile Ala Val Ser Tyr
        195                 200                 205

Gln Thr Lys Val Asn Leu Leu Ser Ala Ile Lys Ser Pro Cys Gln Arg
    210                 215                 220

Glu Thr Pro Glu Gly Ala Glu Ala Lys Pro Trp Tyr Glu Pro Ile Tyr
225                 230                 235                 240

Leu Gly Gly Val Phe Gln Leu Glu Lys Gly Asp Arg Leu Ser Ala Glu
                245                 250                 255

Ile Asn Arg Pro Asp Tyr Leu Asp Phe Ala Glu Ser Gly Gln Val Tyr
            260                 265                 270

Phe Gly Ile Ile Ala Leu
        275
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<210> 8
<211> 270

<212> PRT
<213> Artificial Sequence

<220>
<223> Chimeric TNFa polypeptide encoded by the DNA sequence of SEQ ID NO.: 4

<400> 8

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Val	Leu	Ile	Val	Ile	Phe	Thr	Val	Leu	Leu	Gln	Ser	Leu	Cys	Val	Ala
			20					25					30		
Val	Thr	Tyr	Val	Tyr	Phe	Thr	Asn	Glu	Leu	Lys	Gln	Met	Gln	Asp	Lys
		35					40					45			
Tyr	Ser	Lys	Ser	Gly	Ile	Ala	Cys	Phe	Leu	Lys	Glu	Asp	Asp	Ser	Tyr
	50					55					60				
Trp	Asp	Pro	Asn	Asp	Glu	Glu	Ser	Met	Asn	Ser	Pro	Cys	Trp	Gln	Val
65					70					75					80
Lys	Trp	Gln	Leu	Arg	Gln	Leu	Val	Arg	Lys	Met	Ile	Leu	Arg	Thr	Ser
				85					90					95	
Glu	Glu	Thr	Ile	Ser	Thr	Val	Gln	Glu	Lys	Gln	Gln	Asn	Ile	Ser	Pro
			100					105					110		
Leu	Val	Arg	Glu	Arg	Gly	Pro	Gln	Arg	Val	Ala	Asp	Pro	Val	Ala	His
		115					120					125			
Val	Val	Ala	Asn	Pro	Gln	Ala	Glu	Gly	Gln	Leu	Gln	Trp	Leu	Asn	Arg
	130					135					140				
Arg	Ala	Asn	Ala	Leu	Leu	Ala	Asn	Gly	Val	Glu	Leu	Arg	Asp	Asn	Gln
145					150					155					160
Leu	Val	Val	Pro	Ser	Glu	Gly	Leu	Tyr	Leu	Ile	Tyr	Ser	Gln	Val	Leu
				165					170					175	
Phe	Lys	Gly	Gln	Gly	Cys	Pro	Ser	Thr	His	Val	Leu	Leu	Thr	His	Thr
			180					185					190		
Ile	Ser	Arg	Ile	Ala	Val	Ser	Tyr	Gln	Thr	Lys	Val	Asn	Leu	Leu	Ser
		195					200					205			

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Ala Ile Lys Ser Pro Cys Gln Arg Glu Thr Pro Glu Gly Ala Glu Ala
    210                 215                 220

Lys Pro Trp Tyr Glu Pro Ile Tyr Leu Gly Gly Val Phe Gln Leu Glu
225                 230                 235                 240

Lys Gly Asp Arg Leu Ser Ala Glu Ile Asn Arg Pro Asp Tyr Leu Asp
                245                 250                 255

Phe Ala Glu Ser Gly Gln Val Tyr Phe Gly Ile Ile Ala Leu
            260                 265                 270
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